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CIA-RDP86-00513R001550310001-5

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CIA-RDP86-00513R001550310001-5"

REEL

519

SHURYGIN, G.D.

S/133/62/000/004/003/008
A054/A127

A1562
AUTHORS: Kononov, B.Z.; Kolpakov, A.I.; Shurygin, G.D.; Engineers

TITLE: Semicontinuous casting of stainless steel under synthetic slag

PERIODICAL: Stat', no. 4, 1962, 313 - 315

TEXT: In casting titanium-containing stainless steel, a floating skin forms on the meniscus of the metal in the crystallizer, whose creases may cause severe flaws in the ingot. This skin contains a great amount of non-metallic inclusions. By casting in a shielding atmosphere (argon or propane) it is only possible to avoid those inclusions which are formed on the metal surface, whereas inclusions emerging from the depth of the bath cannot be trapped by this method. It was found more expedient to cover the metal meniscus with liquid slag which absorbs the non-metallic inclusions more thoroughly. The following synthetic slag compositions were tested [(1) traces; (2) heat;]:

Пластика	CaF ₂	SiO ₂	CaO	Na ₂ O	MnO	FeO	Fe ₂ O ₃	Cr ₂ O ₃	Al ₂ O ₃	TiO ₂	MgO	P ₂ O ₅	S
A A (2)	39.08	34.53	20.28	4.78	0.20	0.05	0.09	0.03	0.82	0.27	0.36	0.027	0.035
B B	41.52	34.48	14.79	4.98	0.25	0.08	0.09	0.09	0.92	0.23	0.26	0.032	0.072
C B	47.28	31.60	11.13	5.46	0.19	0.03	0.04	Cнеиз(1)	0.92	0.10	0.10	0.032	0.042
D F	40.20	34.24	20.28	4.62	0.16	0.08	—	—	0.70	0.33	Cнеиз(1)	0.032	0.062

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L 21156-65 EPA(s)-2/EAT(m)/EAP(b)/T/EWA(d)/EWP(e)/EWP(t) ASD(m)-3/AS(mp)-2
WH/JD
ACCESSION NR: AP4045655 S/0133/64/000/009/0805/0808

AUTHOR: Oyks, G. N.; Matevosyan, P. A.; Ansheles, I. I.; Fatkullin, O. Kh.;
Selivanov, V. M.; Shurygin, G. D.; Sivkov, S. S.; Fedan, A. T.

TITLE: Results of vacuum casting ball-bearing steel by different methods B

SOURCE: Stal', no. 9, 1964, 805-808

TOPIC TAGS: vacuum casting, ball bearing steel, degassing alumina rich brick lining

ABSTRACT: A new method involving vacuum casting by gas circulation was developed by the authors in collaboration with B. S. Petrov, M. N. Kul'kova, Ye. N. Ponomarev, Yu. I. Ponomareva, R. M. Zimina, V. I. Fedorov and K. V. Belyakov. The new production process was compared to the method employed at Krasnyy Oktyabr' Plant comprising vacuum casting in the ladle which was found to be ineffective in the treatment of 20 to 30 ton charges. Therefore, the plant metallurgists tried out degassing of the steel in the jet as well as circulation vacuum casting. The specimens were adequately degassed with the

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L 21136-65
ACCESSION NR: AP4045655

steel giving up gas at a rate of 200 to 300 l/min. Hydrogen contents decreased from 43 to 54%. In the process of vacuum casting steel in the ladle, the specimens displayed greater amounts of oxide and sulfide inclusions than in circulation vacuum casting or vacuum casting during reladling. The greatest number of globular inclusion was identified in specimens produced by vacuum casting in the ladle. The appearance of this defect is attributed to the increased contact of lightweight melts with chamotte refractories. The authors give preference to circulation vacuum casting despite globule formation and suggest that the use of alumina-rich brick for the lining of the vacuum chamber through which argon is blown and for the sleeve coil lining would substantially improve this process. However, it still remains to be tested on a mass production scale and with heavy weight melts. Orig. art. has: 3 figures and 2 tables

ASSOCIATION: None

SUBMITTED: 00

NR REF SOV: 003

ENCL: 00

OTHER: 002

SUB CODE: MM

Card 2/2

GROSS, S.A.; GRYAZENIKOV, A.S.; SARYUKOV, V.S.; SHKUSADEV, S.P.; SHURYGIN, I.G.

Some results of the acceleration of filling and discharge operations
on the Tuapse tank farm. Transp. i khran. nefti i nefteprod. no. 9:2-30
'64. (MIRAL7:10)

1. Krasnodarskiy politekhnicheskiy institut i Tuapsinskaya perevalo-
chnaya neftobaza.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5

ARCHIVIST: . . .

Dissertation: "Electrolysis of liquid vinyl." Cand.techn.sci., oral' polytechnic
institute, VORONEZH, 1955. (Referativnyj zhurnal-tekhnika, no 9, Moscow, May 5, 1956)

Scanned: 20 DEC 1994

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5"

SHURYGIN, P. M.

✓ *Electrolysis of fused iron slags. O. A. ESIN AND P. M. SHURYGIN. Doklady Akad. Nauk S.S.R., 94, 1145-47 (1954). Chem. Abstr., 49 [4] 2219i (1955).* —The great experimental difficulties of direct electrolysis of Fe-containing slags with electrodes of graphite or Fe are overcome by using fused Au as the cathode material, which easily dissolves the Fe metal. The C anode is applied in Fe-free Ca-Mg-Al silicate slag, while a current of pure Ni washes the electrode to avoid the spontaneous reaction $Fe^{2+} + e \rightarrow Fe^{2+}$ in the melt. The experiments are made at 1300° to 1400° in a C resistor furnace with a current density of 0.2 to 0.5 amp./cm.². The electrolytic outputs (in % of the theoretical) are plotted as a function of the oxidation degree of the slags given by the ratio % $Fe^{3+}/\% FeO \times 100$. The experimental slag melts have a composition in the system $FeO-Fe_2O_3-SiO_2$, with SiO_2 varying between 8 and 34%. The oxidation degree is decreased with increasing SiO_2 contents. An increase in the degree of acidity of the slag from 8 to 30% brings about a decrease in the output from 82.6 to 8.3%. Slags of the system $FeO-Fe_2O_3-CaO-SiO_2$ (CaO replacing FeO) show much higher outputs than the corresponding CaO -free melts, even for 30 to 35% SiO_2 , while slags of the system $FeO-Fe_2O_3$ never show outputs above 35%. This latter is in contradiction to the opinions of Fischer and Ende (1950) that pure Fe oxide slags would not be able to show any electrolysis. A slag with 40% ($FeO + Fe_2O_3$), 20% Al_2O_3 , and 40% SiO_2 shows a surprisingly good output (22% to 60%) in spite of the high acidity. The very different slopes of the electrolysis curves also indicate the high influence of viscosity of the melts on the regeneration

Final Analytical Data

1/2

Esin, O.R.; Shurygin, P.M.

of Fe^{2+} ions by convection and diffusion from the furnace atmosphere. The electrical conductivity of Fe silicate slags is, however, not exclusively electrolytic; it is in some part electronic. Therefore, a dilution of the Fe oxides by additions of SiO_2 , CaO and Al_2O_3 to the melts causes a reduction of the electronic share of the conductivity and an increased electrolytic output.

2/2

SHURYGIN, O. M.

On the Solubility of Iron In Liquid Slags. P. M. Shurygin
and O. A. Erzin. (Doklady Akademii Nauk S.S.R., 1957,
95, (5), 1043-1045). [In Russian]. The authors found that
a drop of gold placed into molten $FeO-Fe_3O_4$ slag contained
metallic iron after quenching. A similar transfer of iron from
 Fe_2SiO_4 slag into copper was also observed. The authors'
experiments showed that iron is present as an atomic solution
in liquid slags. Experimental data showed that the equilibrium
iron content transferred into gold, at a given temperature,
increases with an increase in the ratio $(\% Fe^{++})^2 / (\% Fe^{+})^3$.

Ural Polytechnic Inst. im. S. M. Kirov

SHURAYGIN, I.M., YESIN, O.A.

"EMF in Slags at Different Temperatures,"
lecture given at the Fourth Conference on Steelmaking, A.A. Baikov Institute of
Metallurgy, Moscow, July 1-6, 1957

"

AUTHORS: Yesin, O. A., Toporishchev, G.A. and Shurygin, P.M.
(Sverdlovsk). 24-5-10/25

TITLE: Electrolysis of molten manganese containing slags.
(Elektroliz rasplavlenykh margantsovistykh shlakov).

PERIODICAL: "Izvestiya Akademii Nauk, Otdeleniye Technicheskikh Nauk",
(Bulletin of the Ac.Sc., Technical Sciences Section),
1957, No.5, pp.85-91 (U.S.S.R.)

ABSTRACT: The fulfilment of the Faraday law is one of the experimental proofs that the interaction between the metals and the slags is electro-chemical (1). Study of the electrolysis of slags rich in MnO and FeO is of particular interest since several authors (2 and 3) express the view that such slags are semi-conductors. In an earlier paper by two of the authors of this article (4) it was shown that cathodic precipitation of iron is possible not only from FeO-SiO₂ slags but also from FeO-Fe₂O₃ melts and the assumption was expressed that the deviation from the Faraday law may be due to the recharging of the ions of the iron. For judging the behaviour of manganese containing slags during electrolysis the authors considered it useful to investigate the cathodic process; the data published by F. Sauerwald and G. Neuendorf (11) are not detailed enough. The authors of this paper

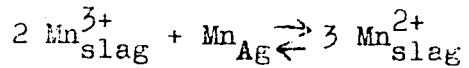
Card 1/4

Electrolysis of molten manganese containing slags. (Cont.)
applied an improved method so as to establish the fundamental causes which determine the degree of utilisation of the current. For the experiments the authors used a cell of the same design as was described earlier (4) for studying the electrolysis of ferrous slags; it consists of a cylinder of molten magnesia into which three compartments are drilled, Fig.1, p.86. The quantity of electricity flow was measured by means of a copper Coulomb meter, the temperature was measured by platinum/platinum-rhodium thermocouple and the sequence of experiments was similar to the one described in an earlier paper by the authors (4). At the temperatures under consideration (1250-1400 C) liquid manganese could be used as a cathode but it was found preferable to use silver instead. The results of the electrolysis of $MnO-SiO_2$ slags at 1250-1350 C are summarised in Table 1, p.87 for 22 tests, the results of the electrolysis of $MnO-SiO_2-CaO$ slags with silver cathodes at 1250 to 1300 C (experiments Nos.23-30) and of $MnO-FeO-SiO_2$ slags at 1300 C (experiment No.31) and of the Fe-Mn alloy at 1500 C (experiments Nos.32 and 33) are summarised in Table 2, p.88, giving in both tables the percentage in weight of Mn^{2+} , Mn^{3+} , Fe total, current intensity, Amp hours and the yield in respect of the current

Card 2/4

Electrolysis of molten manganese containing slags. (Cont.)
established of a heterogeneous equilibrium

24-5-10/25



which is similar to the one established earlier for ferrous slags. It was found that the dissolution of silver in the studied melts is not related to the degree of oxidation of the slag but is directly proportional to the slag volume and the assumption is expressed that silver passes into the slag not in the ionic but in the atomic or the colloidal form.

There are 5 figures, 3 tables, 18 references, 11 of which are Slavic.

SUBMITTED: May 22, 1956.

AVAILABLE:

Card 4/4

137-58-6-11531

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 40 (USSR)

AUTHOR: Shurygin, P.M.

TITLE: The Electrolysis of Fused Slags (Elektroliz rasplavlenyykh
shlakov)

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1957, Nr 67, pp 28-36

ABSTRACT: A discussion is presented of methods of investigation of the electrolysis of fused slags published by various authors. Emphasis is given to the impossibility of using carbon electrodes in the electrolysis of ferrous slags in view of the development of processes of direct reduction. A description is offered of a method of electrolysis of ferrous slags by means of a liquid Au cathode (RzhMet, 1958, Nr 2, abstract 2352). Comparison is made of the results of the determination by various methods of Fe current efficiencies on derivation from slags containing $\text{FeO}-\text{Fe}_2\text{O}_3-\text{SiO}_2$. In all cases an increase in the SiO_2 in the slag leads to an increase in current efficiency. This is explained by the reduction in the Fe^{3+} concentration of the slag as the SiO_2 content increases. An increase in the viscosity of the slag at a constant $\% \text{Fe}^{3+} / \% \text{FeO}$ ratio in the slag leads to an

Card 1/2

SOV/137-58-8-16397

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 25 (USSR)

AUTHORS: Yesin, O.A., Toporishchev, G.A., Shurygin, P.M.

TITLE: The Cathodic Deposition of Manganese From Molten Slags
(Katodnoye osazhdeniye margantsa iz rasplavlenykh shlakov)

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1957, Nr 67, pp 42-50

ABSTRACT: The deposition of Mn was made on a liquid Ag cathode from an $MnO-Mn_2O_3-SiO_2-MgO-CeO$ melt at 1250-1350°C. The current efficiency α increased from 20 to 90% in proportion to the decrease in the degree of oxidation of the melt (Mn^{3+}/Mn^{2+}) 10^3 from 5 to < 1 . The decrease in α is explained by the processes of incomplete reduction of Mn^{3+} on the cathode, i.e., $Mn^{3+} + e \rightarrow Mn^{2+}$. The liquid drops of Ag in the melts studied were saturated with Mn independently from the electrolysis. The transfer of Mn increased with an increase in the $(MnO\%)/(Mn_2O_3\%)$ of the slag.

P.Sh.

Card 1/1 1. Manganese--Electrodeposition 2. Silver (liquid) cathodes
 --Performance 3. Slags--Properties

SOV/137-58-8-16371

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 20 (USSR)

AUTHOR: Shurygin, P.M.

TITLE: On the Equilibrium Between the Ferric and Ferrous Oxides
and Metallic Iron in Molten Slags (O ravnovesii mezhdu okis-
nym, zakisnym i metallicheskim zhelezom v rasplavlenykh
shlakakh)

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1957, Nr 67, pp 54-59

ABSTRACT: The detailed exposition of a previously published work.
(RZhKhim, 1955, Nr 1, abstract 934).

P. Sh.

1. Iron oxides--Chemical reactions
2. Iron
--Chemical reactions
3. Chemical equilibrium

Card 1/1

Shurygin, P.M.

137-1958-2-2352

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 21 (USSR)

AUTHORS Shurygin, P.M., Yesin, O.A.

TITLE The Electrolysis of Ferruginous Slags (Elektroliz zhelezistykh
shlakov)

PERIODICAL. V sb. Fiz.-khim. osnovy proiz-va stali. Moscow. AN SSSR,
1957. pp 464-468. Diskus. pp 505-512

ABSTRACT: Methods are described for electrolyzing ferruginous slags in crucibles of fused magnesia at temperatures of 1300-1400°. A drop of molten Au was used as cathode, because Au dissolved the precipitating Fe, eliminating thereby the possibility of short circuits between the electrodes and of metal losses through involvement of the metal in the slag. It was noted that even in the absence of any current some of the Fe migrated to the Au, which indicated the presence of Fe in the slag not only in the form of ions but in a metallic form as well. The current efficiency during electrolysis went as high as 82.3%. Increasing the concentration of Fe^{3+} ions reduced the current efficiency. This was accounted for by the fact that aside from the discharge of Fe ions, an overcharging of Fe^{3+} ions to Fe^{2+} was occurring at the cathode. It

Card 1/2

137-1958-2-2352

The Electrolysis of Ferruginous Slags

was noted that during electrolysis of the ferruginous slags the influence of the electronic conductivity had to be taken into account.

Yu.N.

1. Slags—Electrolysis 2. Slags—Conductivity

Card 2/2

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УЧЕБНО-ИССЛЕДОВАТЕЛЬСКИЙ ИНСТИТУТ
ПОДДЕРЖАНИЯ ТЕХНИКИ

Investigating the direct reduction process of iron oxides
from molten slag by the electromotive force method. Izv.
vys. ucheb. zav.; chern. met. no. 11:12-19 '60. (MIRA 13:12)

1. Ural'skiy politekhnicheskiy institut.
(Iron oxide) (Electromotive force)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5"

ORLOV, V.I.; YESIN, O.A.; SHURYGIN, P.M.; SHERSTOBITOV, M.A.

Investigation of processes in the interaction of chromium oxide
with silicon, manganese and iron by the electromotive force method.
Izv.vys.ucheb.zav.; chern.met. 4 no.5:28-36 '61. (MIRA 14:6)

1. Ural'skiy politekhnicheskiy institut.
(Chromium alloys—Electrometallurgy) (Electromotive force)

SHURYGIN, P.M.; BORONENKO, V.N.; KRYUK, V.I.

Kinetics of alumina dissolution in fluoride melts. Izv.vys.ucheb.
zav.; tsvet.met. 5 no.3:59-66 '62. (MIRA 15:11)

1. Ural'skiy politekhnicheskiy institut, kafedra teorii
metallurgicheskikh protsessov.
(Aluminum—Electrometallurgy)

SHURYGIN, P.M.; SHANTARIN, V.D.

Investigating the diffusion kinetics of copper, nickel, and iron
solutions in molten metals. Izv. vys. ucheb. zav.; tavet. met.
6 no.4:58-63 '63. (MIRA 16:8)

1. Ural'skiy politekhnicheskiy institut, kafedra teorii
metallurgicheskikh protsessov.
(Diffusion) (Liquid metals)

SHURYGIN, P.M.; ZIL'BERGLEYT, B.I.

Reactive diffusion of carbon, silicon, and phosphorus in their
alloys with iron. Izv. vys. ucheb. zav.; chern. met. 6
(MIRA 16:11);
no.8:13-18 '63.

1. Ural'skiy politekhnicheskiy institut.

SHURYGIN, P.M.; SHANTARIN, V.D.

Metal diffusion in iron-carbon melts. Izv. vys. ucheb. zav.;
chern. met. 6 no.10:5-11 '63. (MIRA 16:12)

1. Ural'skiy politekhnicheskiy institut.

SHURYGIN, P.M.; KRYUK, V.I.

Kinetics of carbon diffusion in iron-base melts. Izv. vys.
ucheb. zav.; chern. met. 6 no.12:14-20 '63. (MIRA 17:1)
1. Ural'skiy politekhnicheskiy institut.

SHURYGIN, P.M.; SHANTARIN, V.D.

Metal diffusion in liquid copper. Fiz. met. i metalloved. 16 no.5:
731-736 N '63. (MIRA 17:2)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.

SHURYGIN, P.M.; BORONENKOV, B.N.

Kinetics of the interaction of the oxides of magnesium, silicon,
and aluminum with melts of the ternary system CaO - SiO₂ - Al₂O₃.
Ogneupory 28 no.12:561-565 '63. (MIRA 16:12)

1. Ural'skiy politekhnicheskiy institut im. S.M. Kirova.

YAROSLAVTSEV, A.S.; SHURGIN, P.M.; SMIRNOV, V.I., akademik

Thermodynamic analysis of reactions involved in the autoclave
leaching of sulfides. Dokl. AN SSSR 153 no.2:408-411 N '63.
(MIRA №:12)
1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova. 2. AN
KazSSR (for Smirnov).

SHURGIN, P.M. (Sverdlovsk); KRYUK, V.I. (Sverdlovsk)

Kinetics of the reduction of silicon and manganese oxides by
an iron-carbon melt. Izv. AN SSSR. Met. i gor. delo no.1:
36-40 Ja-F '64. (MIRA 17:4)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5

SHURYGIN, I.I.; CHAMAKIN, V.V.

Kinetics of the dissolution of metals. Abstr. nauch. trud. Ural.
politekh. inst. no.126:73-79 '63 (MIRA 17:8)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5

SHURYGIN, V.M. (Sverdlovsk); CHASTOV, V.P. (Sverdlovsk)

Kinetics of the dissolution of alloying metals in liquid iron.
Izv. AN SSSR Met. i grec. delo no.4:62-63 Mr-Ap'64 (MIRA 17:8)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5"

SHANTARIN, V.D.; SHURGIN, P.M.

Kinetics of alloying foundry pig iron and steel with additions
of pure metals and ferroalloys. Lit. proizv. no. 7:19-21 Jl '64.
(MIRA 18:4)

SHURYGIN, A. N.; GUMENOV, I. O.

Kinetics of calcium oxide decalification of iron and steel.
Izv. vuz. metal., zav.; chern. met. 7 no.11-12 '64
(MIRA 18:1)

I. Gubkin'skii naftochimicheskii institut.

SHURYGIN, P.M.; KRYUK, V.I.; DROZDOVA, T.S.

Kinetics of silica dissolution in molten alkalis. Zhur.
prikl. khim. 37 no.2:448-450 F '64. (MIRA 17:9)

ACCESSION NR: AP4039619

S/0076/64/005/005/1148/1153

AUTHORS: Boronenkov, V.N. (Sverdlovsk); Yesin, O.A. (Sverdlovsk);
Shury*gin, P.M. (Sverdlovsk)

TITLE: Kinetics of metal deposition from aluminate melts on a disk electrode

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 5, 1964, 1148-1153

TOPIC TAGS: rotating disk electrode, commutator, diffusion coefficient, electron discharge, cathode discharge, manganese, chromium, silicon, vanadium, calcium aluminate, calcium oxide, aluminum oxide, polarization curve, current density, activation energy, natural convection, liquid electrode

ABSTRACT: A disk electrode (molybdenum or chromium cylinder) combined with a commutator was used for determining the ion diffusion coefficient D and the number of electrons z (valence) participating in the process of cathode discharge of manganese, chromium, silicon and vanadium ions from a calcium aluminate solution. Measurements were taken at 1370-1470C; the electrolyte contained 47% CaO, 47% Al_2O_3 and 6% MgO and had a high dissociation potential and low viscosity. The

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ACCESSION NR: AP4039619

ions under study were introduced in 1-4% concentrations as SiO_2 , V_2O_5 , Cr_2O_3 and MnO . Results are graphed and tabulated and the formulas presented. The polarization curves for Mn, Si and V deflected from the background at comparatively low potentials (2nd branch) as did Cr on a molybdenum cathode, while Cr discharge at the chromium cathode starts at close to zero polarization. In an oxidizing atmosphere (air) and at a large CaO content in the electrolyte the V, Si, Cr and Mn ions discharged at the cathode release 5, 4 and 2 electrons (z) respectively. The interaction between Cr_2O_3 and C, and Mn_2O_3 with Mn proceeds rapidly and was not significantly reflected in the process under study. The limiting current densities depend upon the square root of the angular rate of electrode rotation ($\sqrt{\omega}$). They were found at 0.2 - 3 a/cm² and agree with those found in the literature. The diffusion coefficients at various temperatures and for certain concentrations are presented. They agree with those found in the literature only for the lower temperature values. The D_{Mn} , very high, may be caused by the formation of a

Card 2/3

ACCESSION NR: AP4039619

fluid Mn film on the disk cathode at these temperatures. The difference in the order of magnitude of the diffusion coefficient of Si and V (lattice building) and Mn (modifying) is discussed. The activation energies, at 100 kcal/mole for Si, V, Cr and 76 for Mn, are also much higher than those found in the literature. Natural convection greatly affects the results of measurements with liquid electrodes. Orig. art. has: 4 figures, 8 formulas and 1 table.

ASSOCIATION: Ural'skiy polytekhnicheskiy institut im. S. M. Kirova
(Ural Polytechnical Institute)

SUBMITTED: 17May63

ENCL: 00

SUB CODE: GC, GP

NR REF SOV: 016

OTHER: 002

Card

3/3

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5

BORONENKOV, V.N. (Sverdlovsk); SHURGIN, P.M. (Sverdlovsk); SHANFARIN, V.D.
(Sverdlovsk)

Kinetics of metal diffusion in molten sulfides. Izv. AN SSSR.
(MIRA 18:3)
Met. i gor. delo no. 6;97-102 N.I '64.

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CIA-RDP86-00513R001550310001-5"

SHURYGIN, P.M.; BORODENKOV, V.N.; KRYUK, V.I.; REVERTSOV, V.V.

Kinetics of the direct reduction of iron oxides from melts.
Izv. vys. ucheb. zav.; chern. met. 8 no.2:23-27 '65.
(MIFI A 18:2)

I. Ural'skiy politekhnicheskiy institut.

BORODINOV, V.N.; YESIUK, O.A.; SHURGIN, I.M.

Electrochemical study of the kinetics of iron reduction by
graphite from molten oxides. Dokl. AN SSSR 160 no.1:151-153
(MIPPA 18:2)
Ja '65.

I. Ural'skiy politekhnicheskiy institut im. S.M. Kirova. Sub-
mitted July 2, 1964.

BORONENKOV, V.N.; YESIN, O.A.; SHURYGIN, P.M.

Anodic processes on a disk electrode in oxide melts. Elektrokhimiia
1 no.5;592-596 My '65. (MIRA 18:6)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.

BORONENKOV, V.N.; YESIN, O.A.; SHURGIN, P.M.; KUKHTIN, B.A.

Polarization curve method of studying the kinetics of the direct reduction of iron from fused oxides. Elektrokhimiia 1 no.10:1245-1252 O '65. (MIRA 18:10)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.

Б.И. НЕДКОВ, В.А. ГУРЬЯН, О.А. БУРГСОН, В.П. Б.

Kinetics of deposition of metals from fused salt electrolyte on
disk electrode. Zhur. fiz. khim. 58 no. 5 1145-1153 (USSR) 1964.
(BZhF. 1964. 12.)
1. Dzerzhinskii prirodno-tekhnicheskii institut im. Kirrova. Published
May 17, 1963.

SHURYGIN, Viktor Aleksandrovich; OSIPOVA, V.M., red.; YELAGIN, A.S., tekhn
red.

[Heading for the beacon; from the practice of the Orenburg party
organization for the dissemination and introduction of progres-
sive practice in agriculture] Kurs na maiaki; iz praktiki Oren-
burgskoi partiinoi organizatsii po rasprostraneniu i vnedreniu
peredovogo opyta v sel'skom khoziaistve. Moskva, Izd-vo "Sovet-
skaia Rossiia," 1961. 45 p. (MIRA 14:8)

1. Pervyy sekretar' Orenburgskogo oblastnogo komiteta Kommunisti-
cheskoy Partii Sovetskogo Soyuza(for Shurygin).
(Orenburg Province--Agriculture)

SHURYGIN, V.A., inzh.

Butt welding of pipes on a removable padding. Svar. proizv.
no.6:25-28 Je '61. (MIRA 14:6)

1. Saratovskiy politekhnicheskiy institut.
(Electric welding--Equipment and supplies)

39904
S/044/62/000/007/083/100
C111/C333

16 6-600

AUTHORS: Shurygin, V. A., Yanenko, N. N.

TITLE: On the realization of algebraic-differential algorithms
on electronic computers

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 69,
abstract 7V332. ("Probl. kibernetiki", no. 6, M., Fiz-
matgiz, 1961, 33-43)

TEXT: Considered is the realization of algorithms connected with
analytical transformations on the electronic computer "Strela". The
suggested algebraic-differential program (ADP) permits us to solve
quite a large class of problems on the compatibility of systems of
partial differential equations, as well as other problems. The ADP
transforms the so-called polynomials, i. e. expressions

$$\sum \pm a_i x_1^{\alpha_{1i}}, x_2^{\alpha_{2i}} \dots x_n^{\alpha_{ni}}, \quad (1)$$

where a_i, α_{ki} -- arbitrary numbers and x_k -- letters, which can also
be functions of other letters if they are variable. Every mathematical
expression can be written in the form (1) with corresponding
Card 1/2

L 103:4-67 EWP(m)/EWT(1)/EWT(m) WW/JD
 ACC NR: AP6027730 (N)

SOURCE CODE: UR/0020/65/169/001/0795/0798
 34

AUTHOR: Shurygin, V. M.

ORG: Central Aerohydrodynamics Institute im. N. Ye. Zhukovskiy (Tsentral'nyy aerogidrodinamicheskiy institut)

TITLE: Formulation of flow problem over a body with jets and an exact solution of two classes of problems in ideal liquid

SOURCE: AN SSSR. Doklady, v. 169, no. 4, 1966, 795-798

TOPIC TAGS: ideal flow, ideal fluid, conformal mapping, subsonic flow

ABSTRACT: The flow of a uniform ideal fluid over a plane arbitrary body with several jets is investigated analytically. To calculate the forces and moments generated by the fluid interacting with the body, a general theory is formulated where the body is divided into n-planar surfaces with each plane singly-connected and having only a single point removed to infinity. Using the Schwartz-Christoffel transformations, a conformal mapping is obtained which leads to the expression for the interaction moment M

$$M = \frac{1}{2} \rho \operatorname{Re} \oint [F'(z)]^2 z dz + \operatorname{Im} \sum_{k=1}^n \delta_k z_k [\rho v_k^2 \sin(\varphi_k - \theta_k) e^{-i\theta_k} + i p_A e^{-i\theta_k}]$$

Two special cases are considered for a rectangular body with two fluid jets, one

UDC: 532.5

Card 1/2

L 103-4-67

ACC NR: AP6027730

directed along the length of the body and the second across it (see Fig. 1).

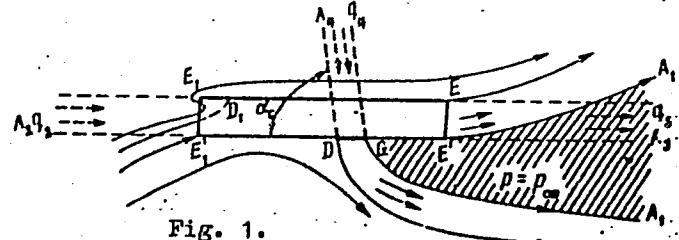


Fig. 1.

This paper was presented by Academician A. A. Dorodnitsyn on 23 November 1965.
Orig. art. has: 15 equations and 2 figures.

SUB CODE: 20/ SUBM DATE: 18Nov65

Card 2/2 5B

SHURYGIN, V. M.,

"Flow Around Wings with Deflected Ailerons at Supersonic Speeds," Collection of Theoretical Papers in Aerodynamics, Moscow, Oborongiz, 1957.

This collection assembles a number of scientific reports, on theoretical aerodynamics, first printed in various publications between 1947 and 1952, and intended for research workers in advanced aerodynamics.

"V-Shaped Wings in Supersonic Flow," Ibid.

SHUPYGIN, V. N. "Flow Around Wings with Deflected Ailerons at Supersonic Speeds.
Collection of Theoretical Papers (Cont.) 823

The report, first published in 1949, considers a supersonic gas flow around ailerons in the presence of a wing at zero angle of attack. The wing and aileron thicknesses and the deflection angles of the ailerons are assumed to be sufficiently small. Seven basic cases may be distinguished which depend on the shape of the wing and the ailerons and on the Mach number of the approach flow. For each case, the formulas for calculating the pressure distribution are presented (section 2). Section 3 gives the derivation of the formulas for determining the aerodynamic characteristics C_y , m_x , m_{hinge} of an aileron for the first case. This report may also be in the aerodynamic calculation of other control surfaces of an aircraft. The report is divided into the following sections:

1. Introduction;
2. Construction of the functions $\psi = v_x + i s$;
3. Determining the aerodynamic characteristics.

The report contains 16 figures. There are 4 references, of which 3 are Soviet and 1 German.

-Card 28/33

Collection of Theoretical Papers (Cont.) 823

Shurygin, V.M. V-shaped Wings In Supersonic Flow

371

The report, first published in 1949, discusses a supersonic gas flow around conical bodies representing a V-shaped wing, the stabilizer of a missile, a fuselage with a V-shaped wing, and a fuselage with a stabilizer. The thicknesses of the bodies and their angles of inclination with respect to the approach flow are assumed to be sufficiently small. Formulas are presented which determine the pressure distribution on the bodies and the aerodynamic coefficients c_y , c_x , c_z , c_{m_x} , c_{m_z} . The appendix gives calculated examples for these coefficients. The report is divided into the following sections: Symbols; Introduction; Basic aspects of Busemann's theory; Ch. I. Flow Around Bodies With Edges Protruding Beyond the Central Mach Cone (Supersonic Edges); 1. Boundary conditions; 2. V-shaped wing; 3. Flow around a missile with a stabilizer; 4. Flow around a fuselage with wings; Ch. II. Flow Around Bodies Situated Within the Mach Cone; 1. Flow

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Collection of Theoretical Papers (Cont.) 823

about a circular cone at an angle of attack α ; 2. V-shaped wing; 3. Flow about the stabilizer of a missile; 4. Flow about a fuselage with a wing; Appendix; 1. Determination of c_y and c_z of a V-shaped wing protruding beyond the Mach cone; 2. Determination of c_y of a fuselage with a V-shaped wing the edges of which protrude beyond the Mach cone; 3. Determination of c_y and c_x of a V-shaped wing, situated within the Mach cone. The report contains 25 figures. There are 6 references, of which 5 are Soviet and 1 German.

Taganov, G.I. Total-pressure Losses in a System of Curved Shock Waves Situated Ahead of a Cascade Consisting of Flat Plates 426

This report was first published in 1952. The magnitude of the total-pressure losses is determined for a system of curved shock waves situated ahead of a cascade of closely spaced flat plates. The losses are determined as functions of the angle of attack. The report contains 4 figures. There are no references.

~~Card 30/33~~

SHURGIN, V.P., kandidat tekhnicheskikh nauk.

Erecting contact network poles from the ground. Transp.strel. 6
no.7:16-17 Jl '56. (MLRA 9:10)
(Electric lines--Poles)

SOV/97-58-8-5/13

AUTHORS: — Shurygin, V.P., Candidate of Technical Sciences and
Nikolayev, M.P., Engineer

TITLE: Reinforced Concrete Pylons Supporting Overhead Wiring
of Electrified Railways (Zhelezobetonnyye opory kontaktnoy
seti elektrifitsiruyemykh zheleznykh dorog)

PERIODICAL: Beton i Zhelezobeton, 1958, Nr 8, pp 298 - 300 (USSR)

ABSTRACT: During the next 15 years, it is planned to electrify 40 000 km of railways. For this electrification, 1 300 000 pylons are required. Figure 1 illustrates construction of standard pre-stressed reinforced concrete pylons: a) conical shape and b) "I" section. The most economical types of pylons are of reinforced concrete where the part above the ground, as well as under the ground is in one. Concrete and steel requirements for centrifugally-manufactured pylons of "I" section are tabulated. These values show that in both cases, the cost is the same. Tests carried out by TsNIIS of Mintransstroy showed that the strength and resistance to crack formations of centrifugally-cast, pre-stressed pylons are much higher than is required. Further tests were carried out on centrifugally produced pylons rein-

Card1/3

SOV/97-58-8-5/13

Reinforced Concrete Pylons Supporting Overhead Wiring of Electrified Railways

forced with tensioned wires. In this case the calculated moment could be increased by 20%. In regard to crack formations, however, it is necessary to increase the reinforcement by 25 - 30% in comparison with the reinforcement required for load-bearing assessment. The technological process of the factory mass-production of centrifugally-manufactured pylons, both with prestressed reinforcement and without, was mastered by Mintransstroy factories sooner than the technological process of mass-production of "I" section pylons. The centrifugal consolidation of concrete increases considerably the density and frost resistance of the concrete. The reinforcement of these prestressed reinforced pylons consists of high tensile cold-rolled wires of 2.5, 3 and 5 mm in diameter, or of hot-rolled steel Mark St.5 or 25G2S of standard profile, also pretensioned. Fig.2 illustrates hydraulic jack for tensioning reinforcement. Details of casting, reinforcing and tensioning of these pylons are discussed in detail. Fig.3 illustrates the bottom half of the formwork with installed reinforcement ready for casting pylons and subsequent centrifugal consolidation. Con-

Card 2/3

SOV/97-58-8-5/13

Reinforced Concrete Pylons Supporting Overhead Wiring of Electrified Railways

crete used is of the Mar' 400-500 prepared from cement with activity of 500 - 600 km/cm² and water/cement ratio of 0.45-0.5 (before centrifugal action). The recommended centrifugal process is as follows: 150 rotations/minute during the first three minutes, 250 rotations/minute the following two minutes and finally, 350 rotations/minute for fifteen minutes i.e., twenty minutes in all. The products are steam-cured. There are 3 Figures.

Card 3, 3

SHURYGIN, Vladimir Pavlovich, kand.tekhn.nauk; DOBSHITS, M.L., inzh.,
red.; KHITROV, P.A., tekhn.red.

[Organizing and carrying out construction and assembly
operations during railroad electrification] Organizatsia
i proizvodstvo stroitel'no-montazhnykh rabot pri elektri-
fikatsii zheleznykh dorog. Moskva, Gos.transp.zhel-dor.
izd-vo, 1959. 223 p. (MIRA 12:8)
(Railroads--Electrification)

SHADRIN, Nikolay Aleksandrovich, prof.; PEREL'MAN, Lev Moiseyevich,
dotsent; REPREV, Andrey Ivanovich, dotsent; SMAGIN, Ivan Serge-
yevich, dotsent; UL'RICH, Sergey Sergeyevich, dotsent. Prinimali
uchastiye: KHACHATUROV, R.A., dotsent; SHURGIN, V.P., kand.tekhn.
nauk; MOZES, B.N., inzh.; ALEKSEYEV, V.N., ekonomist. GRINEVSKIY,
I.A., inzh., red.; KHITROV, P.A.. tekhn.red.

[Railroad construction] Stroitel'stvo zheleznykh dorog. Pod red.
N.A.Shadriina. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va
putei soobshcheniya, 1960. 344 p. (MIRA 13:9)
(Railroads--Construction)

ALEKSEYEV, A.P., kand.tekhn.nauk; BOGIN, N.M., kand.tekhn.nauk;
SHPAKOV, B.V., kand.tekhn.nauk; SHURGIN, V.P., kand.tekhn.nauk

Prestressed reinforced concrete three-stake poles with elastic
cross pieces. Transp.stroi. 10 no.3:16-20 Mr '60.
(MIRA 13:6)

(Electric lines--Poles)

SHURYGIN, V.P., kand.tekhn.nauk; IVANTSOV, M.G., inzh.; KLEYMAN,
V.M., inzh.; MATSNEV, N.F., inzh.; FINTUSHAL', F.V., inzh.;
MUKHRANOV, M.A., inzh.; NIKCLAYEV, N.P., inzh.; ANOSHKIN,
A.I., inzh.; PILIPENKO, M.P., mekhanizator SMP-205; SAVIN,
V.D., mekhanizator SMP-205

"Over-all mechanization of construction in railroad electrification" by A.P. Alekseev. Reviewed by V.P. Shurygin and others. Transp. stroi. 11 no.8:59-60 Ag '61. (MIRA 14:9)
(Railroads--Electrification)
(Alekseev, A.P.)

ALEKSEYEV, Aleksey Pavlovich, kand. tekhn. nauk; DISSON, Pavel
Solomonovich, inzh.; SESSAREVSKIY, Aleksandr Nikolayevich,
inzh.; SOL'YANOV, Aleksandr Andreyevich, kand. tekhn.
nauk; SHUKYGIN, Vladimir Pavlovich, kand. tekhn. nauk;
SHADRIN, N.A., prof., retsentent; GOL'SHUKH, V.V., inzh.;
ABRAGAM, S.R., inzh., red.; BOBROVA, Ye.N., tekhn. red.

[Construction operations in railroad electrification] Stroitel'-
nye raboty pri elektrifikatsii zheleznykh dorog. [By] A.P.
Alekseev i dr. Moskva, Transzheldorizdat, 1962. 287 p.

(MIRA 15:12)

(Railroads--Electrification)

(Railroads--Buildings and structures)

ALEKSEYEV, A.P., kand.tekhn.nauk; SHURYGIN, V.P., kand.tekhn.nauk

Optimum time of "intervals" in the electrification of railroads.
Zhel.dor.transp. 44 no.1-52-54 Ja '62. (MIRA 14:12)

(Railroads - Electrification)
(Railroad engineering)

ALEKSEYEV, Aleksey Pavlovich, kand. tekhn. nauk; DISSON, Pavel Solomonovich, inzh.; SESSAREVSKIY, Aleksandr Nikolayevich, inzh.; SMOL'YANINOV, Aleksandr Andreyevich, kand.tekhn. nauk; SHURGIN, Vladimir Pavlovich, kand. tekhn. nauk; SHADRIN, N.A., prof., retsenzent; GOL'SHUKH, V.V., inzh., retsenzent; ABRAGAM, S., inzh., red.; BOBROVA, B.N., tekhn. red.

[Construction work in railroad electrification] Stroitel'nye raboty pri elektrifikatsii zheleznykh dorog. Utverzhdeno Glavnym upravleniem uchebnymi zavedeniami MPS v kachestve uchebnogo posobiya dlia vysshikh uchebnykh zavedenii zhelezno-dorozhnogo transporta. [By] A.P. Alekseev i dr. Moskva, Transzheldorizdat, 1962. 287 p. (MIRA 16:2)

(Railroads--Electrification)

SHURYGIN, V.P., kand. tekhn. nauk; BARANOV, Ye.A.

Characteristics of the maintenance and operation of reinforced concrete constructions of overhead contact systems.
Elek. i tepl. tsiagu 7 no.10:16-18 0 '63. (MIRA 16:11)

1. Rukovoditel' laboratorii elektrifikatsii zheleznykh dorog Vsesoyuznogo nauchno-issledovatel'skogo instituta transportnogo stroitel'stva (for Sharygin). 2. Starshiy inzh. Glavnogo upravleniya elektrifikatsii i energeticheskogo khozyaystva Ministerstva putey sotsialcheniya (for Baranov).

SHURYGIN, V.P., kand. tekhn. resch; RODINOV, V. . . ; TIKHONOV, L.P., iner.

[Investigating the design of overhead contact systems and methods of constructing them.] Issledovaniye konstruktsii kontaktnoi seti i metodov ee sooruzheniya. Moskva, Transport, 1965. 147 p. (Vsesoyuznyy nauchno-issledovatel'skiy inzhinir transportnogo stroitel'stva. Trudy, no.55) (MIRA 18:7)

I-48110-65
ACCESSION NR: AF5011230

UR/0241/65/010/004/0032/0037
4
B

AUTHOR: Shurygin, V. P.

TITLE: Remote sequelae of irradiation of the lungs in children

SOURCE: Meditsinskaya radiologiya, v. 10, no. 4, 1965, 32-37, and insert facing p. 32

TOPIC TAGS: radiotherapy, lung, tumor, tumor therapy

ABSTRACT: The article is a summary analysis of the case histories of 30 children given X-ray treatments for tumors of the lungs and adjacent region--Hodgkin's disease, lymphosarcoma, mediastinal neuroblastoma, renal adenocarcinoma with metastases to the lungs, and osteosarcoma with metastases to the lungs. Clinical observations were carried out during treatment and at periods ranging from 1 to 4 years after irradiation. Radiation lesions were noted in the lungs of all the children, the severity varying with the total dose and method of irradiation. The clinical symptoms of radiation lesions are less pronounced in children than in adults due, apparently, to the greater regenerative capacity of the growing organism. X-ray indications of radiation lesions in children's lungs are non-specific and they consist mainly of fibrous changes in lung tissue manifested in deformation of the

Card 1/2

L 48130-65

ACCESSION NR: AP5011230

pulmonary markings. These changes tend to diminish the therapeutic value of the radiation because their effects may be more severe than the pathological process itself. Orig. art. has: 3 figures, 1 table.

ASSOCIATION: Kafedra rentgenologii i radiologii Leningradskogo pediatricheskogo meditsinskogo instituta (Department of Roentgenology and Radiology, Leningrad Pediatrics Institute)

SUBMITTED: 11Jun64

ENCL: 00

SUB CODE: LS

NO REF SOV: 008

OTHER: 005

U
Card 2/2

BOGUSLAVSKAYA, L.S.; KARTASHOVA, U.A.; SHURGIN, V.Ye.; RAZUVAYEV, G.A.

Syntheses by means of free hydroxyl radicals. Part 6: Interaction
of hydroxyl and cyclohexyloxy radicals with n-propyl acetate and
toluene. Zhur. ob. khim. 34 no.9:3081-3085 S '64.

(MIRA 17:11)

SHURGIN, V.Ye.

Determination of benzoyl peroxide in carbon tetrachloride in
the presence of free chlorine. Zav.lat. 28 no.3:289 '62.

(MIRA 15:4)

(Benzoyl peroxide) (Carbon tetrachloride) (Chlorine)

LEVIN, T. A., CHURGIN, N. V.

Cutting subangular hypoid gear wheels or machine tools with
an inclining tool spindle. Stan. 1 instr. 35 no. 10623-27 O '64.
(MDR4 17:12)

SHURYGIN, Yu.I., aspirant

Geometrical interrelations of initial surfaces of a hypoid gear.

Izv. vys. ucheb. zav.; mashinostr. no.4:22-27 '65.

(MIRA 18:5)

ZARAIKOV, A.A., assistant; SHURUGINA, N.A., ordinater

Primary cancer of the fallopian tubes. Sborn. nauch. trud. Rost.
ges. med. inst. no.21:71-75 '63.

(MIRA 17:11)

I. Iz kafedry akusherkstva i ginekologii (zav. - prof. P.Ya. Bel'chuk)
Rostovskogo meditsinskogo instituta.

VOROB'YEV, A.A., prof., doktor fiz.-mat. nauk; SIPAYLOV, G.A.; SHURGINA, E.K.

Double stamping of sheet steel for obtaining a given precision
of groove dimensions. Izv. vys. ucheb. zav.; mashinostr. no.10:
150 '58. (MIRA 12:11)

1. Tomskiy politekhnicheskiy institut.
(Sheet-metal work)

SHURYGINA, G.L. [Shuryhina, H.L.]; DREMLIYUG, I.F. [Dremliuh, I.F.];
ZINGER, Kh.M. [Zinher, Kh.M.]

Method for determining the quality of carding based on
mathematical statistics. Leh.prom.no.1:25 Ja-Mr '64.
(MIRA 19:1)

SNURYSINA, K. I.

"Nourishment of the Muskrat by Seasons." Thesis
for degree of Cand. Biological Sci. Sub 8
May 50, Moscow City Pedagogical Inst imeni
V. P. Potemkin

Summary 71, 4 Sep 52, Dissertations Presented for
Degrees in Science and Engineering in Moscow in 1950.
From Vechernaya Modkva, Jan-Dec 1950

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5

SHURYGINA, K.I.

Spring feed of the muskrat. Uch.zap.Kab.ped.inst. no.8:73-87 '55.
(MIRA 10:3)

(Muskrats)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5"

SHURYGINA, K.I.

Morphology and biology of the bottom land of the Perevoznyy Reservoir.
Uch.zap.Kab.ped.inst. no.8:88-115 '55. (MLRA 10:3)
(Balashov Province--Fresh-water biology)

SHURYGINA, K.I.

Remarks on the distribution and population of the Caucasian small mountain suslik (*Citellus pigmaeus musicus* Menetz) in the Baksan gorge. Uch.zap.Kab.ped.inst. no.8:116-123 '55. (MIRA 10:3)
(Baksan Valley--Ground squirrels)

143909-66 EWT(m)/EWP(j)/T RM
ACC NR: AP6015669 (A) SOURCE CODE: UR/0413/66/000/009/0075/0075

33
B

INVENTOR: Kuznetsov, Ye. V.; Gusev, V. I.; Semenova, L. S.; Shurygina, L. A.

ORG: none

TITLE: Method of obtaining organophosphorus polymers. Class 39, No. 181290

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 75

TOPIC TAGS: polymerization, catalyst, titanium tetrachloride, triethylaluminum,
organophosphorus polymer

ABSTRACT: An Author Certificate has been issued for a method of obtaining organo-
phosphorus polymers by polymerization of unsaturated phosphates in a medium of an
inert liquid upon heating in the presence of a catalyst. To expand the variety of
catalysts, the system of titanium tetrachloride—triethylaluminum is used as the
catalyst. [Translation] [NT]

SUB CODE: 11/ SUBM DATE: 22Feb62/
07/

Card 1/1

LJM UDC: 678.745.73

GROMOVA, N.M.; SHURYGINA, L.M.; KARIKH, M.T.

Planning self-supporting pharmacies. Apt. delo 11 no.2:7-18 Mr-Ap
'62. (MIRA 15:5)

1. TSentral'nyy aptechnyy nauchno-issledovatel'skiy institut.
(DRUGSTORES)

GLADKOVSKIY, A.K.; DEGTYAREV, D.D.; SHURYGINA, M.V.

Origin of Devonian bauxites in the Urals. Nauch. dokl. vys. shkoly;
geol.-geog. nauki no.3:134-138 '58. (MIRA 12:1)

1. Sverdlovskiy gornyy institut.
(Ural Mountains--Geology, Stratigraphic)
(Bauxites) (Petrology)

KHODALEVICH, A.N.; BREYVEL', I.A.; BREYVEL', M.G.; VAGANOVA, T.I.
[deceased]; TORBAKOVA, A.F.; YANET, F.Ye.. Prinimali uchastiye:
SOKOLOW, B.S.; VAGANOVA, T.I. [deceased]; SHURGINA, M.V..
PRONIN, A.A., red.; GOROKHOVA, T.A., red.izd-va; GUMNOVA, O.A.,
tekhn.red.

[Brachiopods and corals from the Eifelian bauzite-bearing deposits
of the eastern slope of the Central and Northern Urals] Brakhio-
pody i korally iz eifel'skikh boksitonosnykh otlozhenii vostoch-
nogo sklona Srednego i Severnogo Urala. Moskva, Gos.nauchno-tekhn.
izd-vo lit-ry po geol. i okhrane nedr, 1959. 282 p. (MIRA 13:3)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr.
Ural'skoye geologicheskoye upravleniye.
(Ural Mountains--Brachiopoda, Fossil)
(Ural Mountains--Corals, Fossil)

VARGANOV, V.G.; SHURYGINA, M.V.

The Silurian in the area of Bilimbay on the western slope of the
Central Urals. Sov. geol. 4 no.4:129-133 Ap '61. (MIRA 14:5)

1. Ural'skoye geologicheskoye upravleniye.
(Bilimbay region--Geology, Stratigraphic)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001550310001-5

APPROVED FOR RELEASE: 08/31/2001

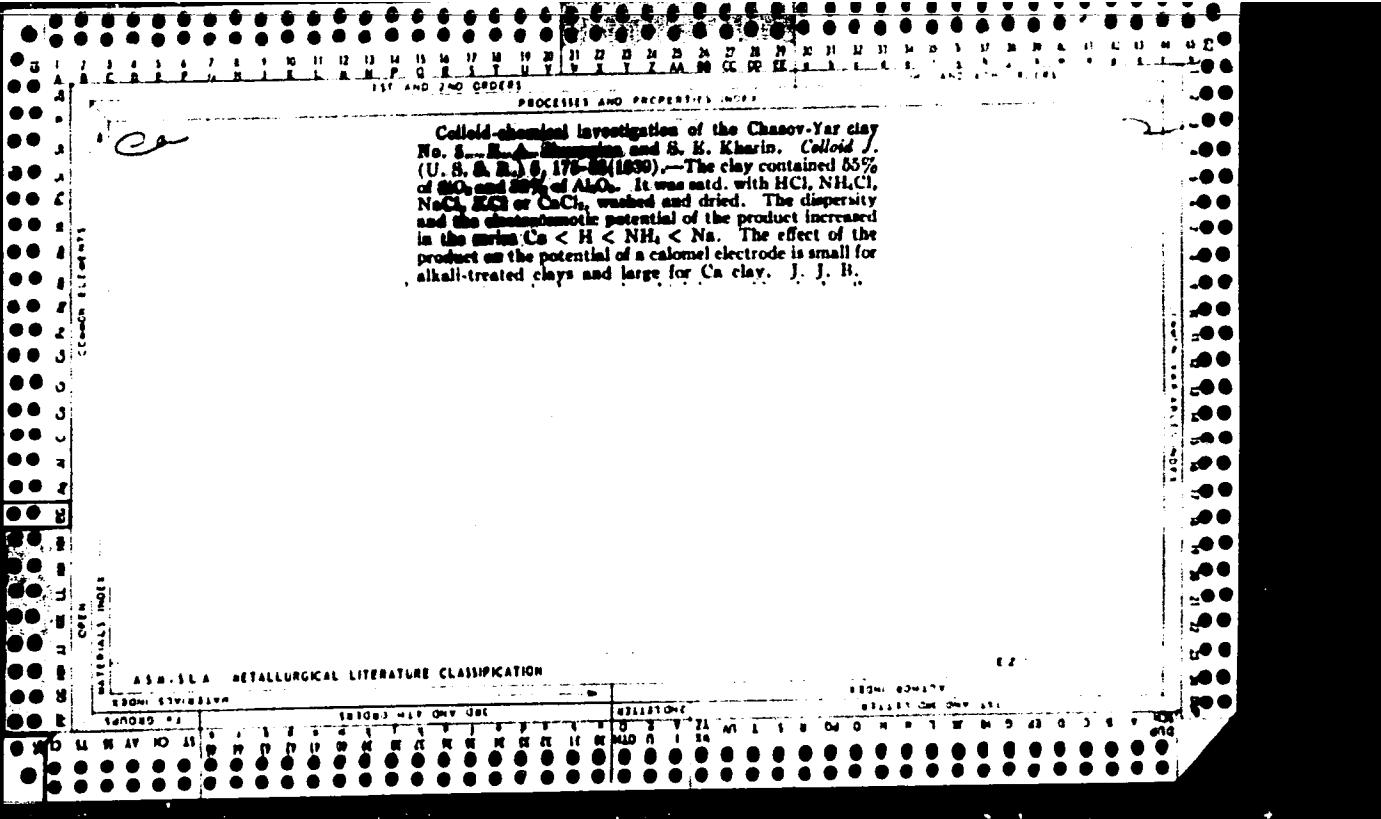
CIA-RDP86-00513R001550310001-5"

FEL'DMAN, V.; SHURYGINA, V., uchenyy sekretar'

Studying and teaching. NTO no.11:39-40 II '59.
(MIRA 13:4)

1. Predsedatel' soveta pervichnoy organizatsii Nauchno-
tehnicheskogo obshchestva Ust'-Kamenogorskogo svintsov-
tsinkovogo kombinata(for Fel'dman).
(Ust'-Kamenogorsk--Mining research)

Bound water in iron and aluminum hydroxide soils 1
Shurugina. *Colloid J. (U. S. S. R.)* 2, 35-60(1946).
On the basis of refractometric studies Sh. finds that these
soils are hydrophylic. Data obtained by x-ray methods
methods agree very well with these. On aging or at
higher temps. the amt. of bound water decreases. Hetero-
tropic gel formation and its reverse are not accompanied
by changes in the amt. of bound water. The results are
used to explain the similarity of the hydrophylic properties
of the Russian "red" and "black" soils in spite of large
differences in humic acid content. P. H. R.



KIRIASHVILI, V.L. A.

Apr 1948

ISRA/Minerals

145

X-Ray Analysis

"Roentgenographic and Thermographic Characteristics of Montmorillonite clays,"
K. I. Korshner, L. I. Palyutina, 6 pp

"Rockwood" No 4

This is one of widest distributed mineral clays. Tests conducted to clarify genesis and structure of montmorillonite clays. However, it was first necessary to determine similarities and differences of subject clays to other clays in various deposits. X-ray studies made to determine curves showing effect of heating on subject clays. X-ray studies also made of cultural soils and comparisons were made of two series of X-ray data.

PA 507104

SHURVINA, Ye. A.

"Thermographic Determination of the Minerals in the Slimy Fraction of Soils, without Burning the Organic Substances," Dok. AM, 67, No. 6, 1949; Roentgenoelectrographic Lab. Soil Inst. im V. V. Dokucharev; Acad. Sci., 1949.

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CIA-RDP86-00513R001550310001-5

СЕМЕНОВА, №. А.

"The Mineralogical Characteristics of Muddy Fractions Separated Gradually from Soils
and Clays," 62, No. 1, 1947. Soil Inst. im. V. V. Dokuchayev, c1949-.

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Thermal curves of minerals encountered in soils and rocks. N. I. Gorbanov and E. A. Shurygina (X-ray-Electromagnetic Lab., Soil Inst., Acad. Sci. U.S.S.R.), *Pochvovedenie* (Pedology) 1950, 307-73. - The differential thermal curves of the following minerals are given: albite, quartz, muscovite, hydrous mica, kaolinite, halloysite, ferrihalloysite, nontronite, beidellite (yellow, white, gray-green), montmorillonite (askanite, askan-clay, bentonite), pyrophyllite, talc, monothermite, hematite, hydrohematite, hydrogoethite, limonite, hydrated iron oxide, diaspore, boehmite, gibbsite, hydrated oxide of Al, calcite, aragonite, gypsum, chlorite, hornblende, amorphous silica, and humic acid. Besides, there are thermal curves of mixts. of sand and Al_2O_3 (80 and 20, 70 and 30, 50 and 50, 40 and 60, 20 and 80, 10 and 90), and 8 and 94% of sand Al_2O_3 , resp., of mixts. of askanite and muscovite, and of mixts. of kaolinite and muscovite. The individual curves are discussed.

J. S. Joffe

SHURYGINA, YE. A.

GORBUNOV, N.I.; TSYURUPA, I.G.; SHURYGINA, Ye.A.; TYURIN, I.V., otvetstvennyy redaktor; GORBUNOV, N.I., professor, otvetstvennyy redaktor; MARKOV, V.Ya., redaktor; ZELENKOVA, Ye.V., tekhnicheskiy redaktor

[X rays, thermograms and dehydration curves of minerals found in soils and clays] Rentgenogrammy, termogrammy i krivye obezvozhivaniia mineralov, vstrechayushchikhsia v pochvakh i glinakh. Moskva, Izd-vo Akademii nauk SSSR, 1952. 185 p. [Microfilm] (MLRA 7:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Tyurin)
(Minerals in soil)

ЛЮЧЕНКО, В. А.

"Mineralogical Characteristics of Muddy Fraction of Chernozems of Kareninaya Steppe," Voprosy travugol'nykh sistemy zemledeliya, Vol. 2, pp. 357-362, 1953.

By means of dispersive, thermal (curves of heating and dehydration), and roentgenostructural analyses the author investigated three samples of chernozem soils. He presents the thermal effects for clay minerals predominating in the muddy (slimy) fraction: kaolinite, galloisite, beidellite, nontronite, montmorillonite, and hydromicas. He established the predominance in the muddy fraction of beidellite by comparison of the curves of heating of samples of soils with standard curves of heating of the individual minerals of clay. Comparison of curves of dehydration of soils and of beidellites also testified to the predominance of beidellite in the muddy fraction of soils.
(RKhGeol, no. 4, 1955)

Sum. No. 681, 7 Oct 55

SHURYGINA, Ye. A.

"An Investigation of the Mineralogical Composition of Soils by the Thermal Method." Soil Inst, Acad Sci USSR, 17 Dec 54. (VM, 8 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556 24 Jun 55

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Thermal method of investigating the aging of iron and aluminum hydroxide gels. Trudy pochv. inst. 53:104-112 '58. (MIRA 11:9)
(Soil colloids) (Aluminum hydroxide) (Iron hydroxide)

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Artificial mixtures of minerals in the thermal analysis of soils.
Trudy pochv. inst. 53:143-163 '58. (MIRA 11:9)
(Minerals in soils) (Thermal analysis)

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History of thermal analysis in investigating minerals and soils.
Trudy pochv. inst. 53:164-178 '58. (MIRA 11:9)
(Thermal analysis) (Minerals in soil)

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"Differential thermal analysis as applied to building science"
by V.A.Ramachandran, S.P.Gary. Reviewed by E.Shurygina.
Pochvovedenie no.12:109 D '59. (MIRA 13:4)
(Bibliography--Thermal analysis)
(Bibliography--Building materials)
(Ramachandran, V.A.) (Gary, S.P.)

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Significance of adsorbed cations in determining clay minerals in soils
and clays. Pochvovdenie no.9:87-94 S '60. (MIRA 13:9)

1. Pochvennyy institut im. V.V.Dokuchayeva Akademii nauk SSSR.
(Minerals in soil) (Clay--Analysis)